THE SHROUD AND THE CUBIT MEASURE
By IAN DICKINSON

One of the few U.K. representatives at the Paris Symposium was BSTS member Ian Dickinson of Canterbury. He writes on a most interesting new theory with regard to the Shroud's measurements:

In early August, after arranging to attend the Paris Shroud Symposium, I was looking through the material that I have on the Shroud, and it seemed to me that the measurements of the cloth looked odd, i.e. 14 feet 3 inches by 3 feet 7 inches. Searching through all the books, they did not even produce the same dimensions; some gave "approximately" 14 feet, others incorrect metric conversions. However the 14 feet 3 inches by 3 feet 7 inches appeared to be the most reliable reading and I later verified this with John Jackson at the Symposium, who took these measurements from the Shroud. After all the precise scientific calculations on the Shroud, these inconsistent dimensions of the cloth seemed incongruous, scarcely surprising as they are twentieth century measurements. But would they seem so if the Shroud had been measured out in 1st century AD Jerusalem ... by the cubit?

I contacted Ian Wilson to see if any research had been done on the Shroud's dimensions and learned that to the best of his knowledge there was little beyond the dimensions quoted in his book *The Turin Shroud*.

In researching cubits of the Scriptures, metrology was involved, an exact science. But again I was amazed to find errors in calculations, e.g. conversions of metric to imperial. And records of measurements seemed to contradict. Until the 20th century there was no agreement amongst metrologists for certain Biblical measurements. However, evidence for various cubits appeared. In the Louvre Museum, Paris can be seen the Royal Egyptian cubit of 20.67 inches. The Egyptian cubit is closely connected with the Royal cubit of Ezekiel ch. 40 v.5 now recorded as 20.51 inches. The Ezekiel Royal cubit was a sixth greater than the normal standard cubit, which was used for the Siloam tunnel in Jerusalem, i.e. near enough 17.58 inches, calculated from the excavations at Megiddo and other sites in the Holy Land on this multiple.

Important discoveries and excavations began at Jerusalem in 1888 in a place possibly identified as the Palace of Caiaphas. Here were found, under what is now the ecclesiastical building of St. Peter in Gallicantu, sets of 1st. century AD weights and measures used by the Jewish authorities. What makes these so significant is the inscription on a door lintel found within the palace rubble. Not all the inscription is clear, but one word is: "Korban", in square Hebrew characters of the 1st century AD. This is the Hebrew for "offering", i.e. to God, and is to be found in Mark ch. 7 v.11, and Matthew ch. 27 v.6. These weights and measures then, were part of the official bureau de change for sanctuary standards. Jewish coins found with the measures confirm a 1st century date prior to the destruction of Jerusalem. No cubit rods were found. In any event they would probably have disintegrated if made from wood. But they are recorded as part of Temple standards, as will be seen.

So there were cubits for Temple use, and various other applications, but it is a particular cubit of the market place that is connected with the Shroud, the cubit that is known as the Assyrian cubit: the widely used, indeed, international standard of that time for merchants of the Near East, and had been so for centuries. This cubit of commerce was carried with the *lingua communis*, the language of trade and diplomacy that stretched from the Euphrates to the
Mediterranean, the tongue that had become the common language of the Jew. Aramaic: the same language which Jesus spoke. Aramaic had been the communication medium of the Assyrian Empire and Israel had been a subject of Assyria.

Another important connection of history is the tracing of this Assyrian cubit to Babylon. Assyria annexed Babylonia. The height of Assyrian power was the 8th and 7th centuries BC. In 597 BC Jerusalem fell to the then-expanding Babylonian Empire, and so began the Jewish Exile. Now during the 19th century the great archaeological pioneer Sir Flinders Petrie, along with a co-researcher, Oppert, took numerous measurements of ancient buildings in Babylon from which they found the metrological value of the Assyrian cubit to be almost 21.5 inches. Other archaeologists have since calculated just over 21.6 inches. So the Assyrian cubit has been recorded as 21.6 plus or minus 0.2 inches - and this is just what the Shroud conforms to.

Taking the lower limit of 21.4 inches, the results are:

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\begin{align*}
21.4 \text{ inches } \times 8 &= 171.2 \text{ inches} \\
\text{Shroud recorded length} &= 171.0 \text{ inches} \\
21.4 \text{ inches } \times 2 &= 42.8 \text{ inches} \\
\text{Shroud recorded width} &= 43.0 \text{ inches}
\end{align*}
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Worth noting is that a small part of the Shroud would have to have been used for the rolled edges, and this is an aspect that needs further research, especially into the nature of the side strip. So the Shroud is now provided with a margin of cloth to give an original cubit length approaching 21.6 inches, i.e. before the edges on the cloth were made. This all indicates that the Shroud cloth was very carefully measured to be so exact over such a length - and this is another strong piece of evidence, because fine linen was valuable merchandise, and would have been cut with appropriate precision. So valuable was fine linen that it ranked with gold, silver and silk, was associated with sacred use in the Temple, and prescribed for the robes of priests, the material of the rich. Linen was associated with very holy persons, cf. Daniel ch. 10 v.5. And so it was that about 4.30 pm on Friday 3rd April 33 AD, Joseph of Arimathea purchased in the cloth quarter of Jerusalem a fine linen Shroud of 8 cubits by 2 cubits, for the burial of Jesus...

SPECIAL NOTE: Ian Dickinson, who has a special knowledge of Syriac, will give the next BSTS lecture on this and related topics, including some fresh insights on the sidestrip, and why the Shroud face appears separate from the body. This will be held on the evening of May 9 at the usual venue. For fuller details see page 16.